



THE NAVAJO NATION

P.O. BOX 308

WINDOW ROCK, ARIZONA 86515

(602) 871-4941

PETERSON ZAH
PRESIDENT

25 June 1992

MARSHALL PLUMMER
VICE PRESIDENT

M E M O R A N D U M

TO: Tony Robbins, Reclamation Specialist II
AML Reclamation Department
Tuba City Field Office

FROM: Annette Polt
Annette Polt, Data Manager
Natural Heritage Program
Fish & Wildlife Department

SUBJECT: SPECIES OF CONCERN FOR PROPOSED CAMERON PROJECT 3 AND
CAMERON PROJECT 4 AML RECLAMATION SITES

A search of the Navajo Natural Heritage database has been completed in response to John O'Brien's 6 April 1992 information request concerning the subject projects. This search has identified several species of concern as either occurring or potentially occurring in the project areas.

Tribal and federal status for each species is indicated as follows: Navajo Endangered Species List (NESL), Endangered Species Act (USES), Migratory Bird Treaty Act (MBTA), and Bald Eagle Act (BEA). Information is not provided on state listing. Species included below which do not occur on any Navajo, federal, or state listing have no legal protection and are included for project planning and information gathering purposes only. Additionally, species with USESA candidate or NESL group 4 status have no legal protection under the USESA and the NESL, respectively, and are included for project planning purposes only.

NA-0124, 0131, 0134, 0137 sites:

Species known to occur on or adjacent to these sites include:

1. Amsonia peeblesii (Peebles blue-star); NESL group 4; USESA category 3C.
2. Astragalus beathii (Beath milk-vetch).
3. Cymopterus megacephalus (Bighead water parsnip); NESL group 4; USESA category 2 candidate. Found on north flank of Shadow Mountain, north of these sites.
4. Phacelia welshii (Welsh phacelia); NESL group 4; USESA category 2 candidate.
5. Rana pipiens (Leopard frog); NESL group 4.



USESA endangered. Large complexes of prairie-dog towns are known to occur in the area. Black-footed ferret surveys should be conducted depending on activity in the towns.

All sites:

Of additional concern is the riparian habitat of the Little Colorado River and associated species, including downstream fish species such as Gila cypha (Humpback chub); NESL group 2; USESA endangered.

Waterfowl species are of concern if any sites are near flooded areas.

Effective road closures should be implemented for any roads developed or improved in conjunction with the reclamation of these sites.

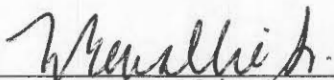
Surveys should be conducted during the appropriate season for the species listed above. If you have questions pertaining to surveys, contact John Nystedt, Environmental Assessment Reviewer, Navajo Fish & Wildlife Department, at extension 7060.

Your evaluation of this site should include a site description and a summary of activities that may occur during reclamation. Also, please include this type of information in future requests for T&E information. It will help our biologists in their evaluation of potential impacts to species.

The information in this report is based on existing data known to the Heritage Program at this time. It should not be regarded as the final statement on the occurrence of any species of concern nor should it substitute for on-site surveys for these species. Also, because the Heritage database is continually updated and because information requests are evaluated by type of action, any given information response is only wholly appropriate for its respective request.

If you have any questions I may be reached at extension 7603.

C O N C U R R E N C E


Larry Benallie, Sr., Director
Fish & Wildlife Department



THE NAVAJO NATION

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VICE PRESIDENT

January 13, 1994

Ronald N. Sassaman, AML Program Specialist
Office of Surface Mining Reclamation and Enforcement
505 Marquette Avenue, Suite 1200, N.W.
Albuquerque, NM 87102

Subject: Cameron AML Project #3 & #4
T & E Species Survey

Dear Mr. Sassaman:

Enclosed is a copy of the "Threatened and Endangered Species Survey and Biological Evaluation" for NAMLRD on Cameron AML Project #3 and #4. In addition, copies of correspondences between NAMLRD and Navajo Fish and Wildlife and U.S. Fish and Wildlife are attached for your information. Please include these copies into the Cameron Project #3 and #4 grant application package.

If you have any comments and/or recommendations please, contact the Tuba City AML Field Office at (602) 283-4845. Thank you.

Sincerely,

Ray Tsingine, Reclamation Specialist III
Navajo AML Reclamation Department
Tuba City Field Office
P.O. Box 730
Tuba City, AZ 86045

CC: central files
cam/cp3/4

THE NAVAJO NATION

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PETERSON ZAH
PRESIDENT

MARSHALL PLUMMER
VICE PRESIDENT

November 9, 1993

M E M O R A N D U M:

TO: Tony Robbins, Reclamation Specialist
NAMLRD, Tuba City Field Office

FROM: 
Steven Chischilly, Biologist
Biological Survey Services
Navajo Natural Heritage Program

SUBJECT: T&E SURVEY FOR NAMLRD CAMERON III AND IV PROJECTS

The Navajo Abandoned Mine Reclamation Department (NAMLRD) has contracted the Biological Survey Services Program (BSSP) of the Navajo Fish & Wildlife Department (NFWD) to conduct a threatened and endangered (T&E) species survey for the proposed Cameron III and IV reclamation projects. The T&E surveys are needed as part of the environmental assessment (EA) process.

Golden eagles nests are suspected on the cliffs which surround the project sites and potential nesting habitat for ferruginous hawk nesting is also available. Golden eagles and ferruginous hawks may be negatively affected by project construction if blasting, drilling and other construction activities occur during respective breeding seasons. Avoidance in conjunction with the breeding season is recommended for Cameron projects III and IV sites which are less than 1.5 miles from Black Point.

A survey will be conducted in March 1994 to determine if eagles are nesting on or in the vicinity of Black Point. If an active nest is not located then construction may commence with no negative effects expected upon the golden eagle. If a nest is found and is active then a 1.5 mile buffer from the nest is recommended with no construction activity from March through August within the buffer. If the construction site is within line of site from the nest then a 2.5 mile buffer is recommended.

It is expected that other species of concern will not be negatively affected by the construction of these projects.

If you have any questions concerning the attached report, recommendations, or the biological field survey you can call me at (602) 871-6702.

xc: File/Chrono
EA File

NOV 1993
TUBA CITY AML
FIELD OFFICE
P.O. BOX 730
TUBA CITY, AZ 86045

**THREATENED AND ENDANGERED SPECIES SURVEY
AND BIOLOGICAL EVALUATION**

for:

**NAVAJO ABANDONED MINE LAND RECLAMATION
DEPARTMENT**

project:


**CAMERON PROJECTS III AND IV:
ABANDONED URANIUM PITS**

Submitted by:

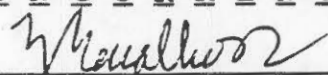
**NAVAJO FISH & WILDLIFE DEPARTMENT
BIOLOGICAL SURVEY SERVICES
P.O. BOX 1480
WINDOW ROCK, ARIZONA 86515**

NOVEMBER 9, 1993

Report prepared by:


Steven Chischilly, Biologist
Biological Survey Services
Navajo Fish & Wildlife Department

C O N C U R R E N C E:


Larry Benallie, Sr., Director
Navajo Fish & Wildlife Department

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV,
October 1993.

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INTRODUCTION

The Biological Survey Services Program (BSSP) of the Navajo Fish & Wildlife Department (NFWD) was contracted by the Tuba City field office of the Navajo Abandoned Mine Lands Reclamation Department (NAMLRD) to conduct a threatened and endangered (T&E) species survey for the abandoned uranium mines which make up the Cameron projects III and IV. Cameron project III consists of 9 abandoned mines and Cameron project IV consists of 13 sites. The T&E survey is required as part of the Environmental Assessment (EA) process.

Cameron projects III and IV are scattered near Cameron, Arizona on the Navajo Nation. Cameron is approximately 50 miles north of Flagstaff, Arizona. The site locations range from approximately 6.5 miles east northeast of Cameron to 6 miles southeast of Cameron (Figures 1-5).

The objective of the T&E survey is to determine the status of federally and tribally listed T&E species in and around the proposed reclamation project sites and assess any impacts to those species as a result of these projects. A general description of the study areas and accompanying vegetation is provided, and habitat that is deemed critical to a particular species, or group of species, will be identified. Recommendations for mitigation and avoidance measures to eliminate negative impacts to T&E species, species of concern, or critical habitat, will be provided if applicable.

The project areas contain the following features: open adits; prospect adits; partially collapsed adits; rimstrips; trenches; and associated spoil piles. Proposed activities to reclaim these features include backfilling, re-excavation of improperly backfilled portals, and drilling. Other activities include: diversion channels and/or berms, check dams, construction of replacement dams, and upgrading of access roads.

The project areas are located on three USGS 7.5" quadrangles: Cameron North, Cameron SE, and Wupatki NE.

Project site number, site name, site acreage and associated USGS quadrangle are listed in Table 1 for Cameron projects III and IV.

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV,
October 1993.

Table 1. Cameron Projects III and IV reclamation sites.

<u>Number</u>	<u>Name</u>	<u>Acres</u>	<u>USGS 7.5' Map</u>
CAMERON III			
1.NA-0155a	Charles Huskon No. 10	25.92	Cameron SE
NA-0155b		12.38	Cameron SE
2.NA-0163	Ryan No. 1	7.51	Cameron SE
3.NA-0166	Charles Huskon No. 11	25.36	Cameron SE
4.NA-0172a	RAMCO No. 21	15.29	Wapatki NE
NA-0172b		18.76	
5.NA-0173	RAMCO No. 22	20.25	Wupatki NE
6.NA-0174	RAMCO No. 20	15.11	Wupatki NE
7.NA-0175	Ryan No. 2	105.83	Wupatki NE
8.NA-0179	Yazzie No. 1	7.89	Wupatki NE
9.NA-0180	Yazzie No. 2	32.60	Wupatki NE
TOTAL ACRES		286.88	
CAMERON IV			
1.NA-0124	Jack Daniels No.1-5	56.03	Cameron North
2.NA-0131	Max Johnson No. 9	26.79	Cameron North
3.NA-0134	Alyce Tolino No 1 & 3	33.59	Cameron North
4.NA-0137	Yazzie No. 312	31.70	Cameron SE
5.NA-0145	Manuel Denetsone No. 2	1.00	Cameron SE
6.NA-0184	Charles Huskon No. 17	18.64	Wupatki NE
7.NA-0186	Jackpot No. 1	4.03	Wupatki NE
8.NA-0187	Jackpot No. 5	4.42	Wupatki NE
9.NA-0194	Julius Chee No. 3	40.99	Wupatki NE
10.NA-0195	Julius Chee No. 2	13.11	Wupatki NE
11.NA-0196a	RAMCO No. 24	32.20	Wupatki NE
12.NA-0197	Charles Huskon No. 4	85.10	Wupatki NE
NA-0198	Paul Huskie No. 3		
13.NA-0199x	Emmett Lee No. 3	19.77	Wupatki NE
TOTAL ACRES		367.37	

TOTAL ACREAGE FOR BOTH PROJECTS: 654.25

METHODS

Steven Chischilly, Biologist, Biological Survey Services met with Tony Robbins of the Tuba City AML field office on June 29, 1993 in Tuba City. This meeting was to acquaint Chischilly with the mine sites and the methods of reclamation.

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV,
October 1993.

The project sites of Cameron III and IV were surveyed on June 29, 30 and July 1 and 2 by hiking and observing the sites as well as the perimeter of the project areas. Plants and animals were identified either on sight, tracks, call or by scat. Plants not identifiable in the field were collected for later identification in the laboratory.

RESULTS

Species of concern were identified by the Navajo Natural Heritage Program database (Table 2). These species have the potential to occur within or in the vicinity of the project area.

Table 2. Species of concern identified as having potential to occur in the project areas by the NNHP database for the Cameron III and IV reclamation project sites.

NA-0124, 0131, 0134, 0137 sites:

1. Amsonia peeblesii (Peebles blue-star); NESL group 4; USESA category 3C.
2. Astragalus beathii (Beath milk-vetch).
3. Cymopterus megacephalus (Bighead water parsnip); NESL group 4, USESA category 2 candidate.
4. Phacelia welshii (Welsh phacelia); NESL group 4; USESA category 2 candidate.
5. Rana pipiens (Leopard frog); NESL group 4.
6. Pediocactus peeblesianus var. fickeiseniae (Fickeisen plains cactus); NESL group 3; USESA category 1 candidate.
7. Aquila chrysaetos (Golden eagle); NESL group 3; MBTA; BEA.
8. Buteo regalis (Ferruginous hawk); NESL group 3; USESA category 2 candidate; MBTA.

NA-0155a,b, 0163, 0166:

1. Astragalus sophoroides (Painted Desert milk-vetch).
2. Aquila chrysaetos (Golden eagle); NESL group 3; MBTA; BEA.
3. Buteo regalis (Ferruginous hawk); NESL group 3; USESA category 2 candidate; MBTA.

NA-0172a,b, 0173, 0174, 0175, 0179, 0180, 0184, 0186:

1. Astragalus sophoroides (Painted desert milk-vetch).
2. Speotyto cunicularia (Burrowing owl); MBTA.
3. Aquila chrysaetos (Golden eagle); NESL group 3; MBTA; BEA.
4. Buteo regalis (Ferruginous hawk); NESL group 3; USESA category 2 candidate; MBTA.
5. Mustela nigripes (Black-footed ferret); NESL group 2; USESA endangered.

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV,
October 1993.

NA-0194, 0195, 0196a, 0197, 0199x:

1. Psorothamnus thompsonae var. whitingii (Whiting indigo bush); NESL group 4; USESA category 2 candidate.

Table 2. Continued.

2. Speotyto cunicularia (Burrowing owl); MBTA.
3. Aquila chrysaetos (Golden eagle); NESL group 3; MBTA; BEA.
4. Buteo regalis (Ferruginous hawk); NESL group 3; USESA category 2 candidate; MBTA.
5. Mustela nigripes (Black-footed ferret); NESL group 2; USESA endangered.

All sites:

1. Gila cypha (Humpback chub); NESL group 2; USESA endangered. Of additional concern due to the possibility of affecting the riparian habitat of the Little Colorado River.

The vegetation type characteristic of the Cameron III and IV problem areas as described by Brown (1982) is Great Basin Desertscrub of the shadscale series (Table 2). The areas are located in the Painted Desert of the Navajo Nation, a cold temperate desert. The open pits with standing water had Salt Cedar (Tamarix chinensis) growing on the pond banks. Areas recently disturbed were characterized by Russian Thistle (Salsola sp.). Most of the tailing piles were devoid of plant life. At the time of the survey no plant species of concern were identified from any of the sites.

Table 3. Dominant vegetation occurring on or in the vicinity of the Cameron III and IV project sites.

Sites NA-0155a,b, -0166:

Shadscale (Atriplex confertifolia)
Broom Snakeweed (Gutierrezia sarothrae)
Camelthorn (Alhagi camelorum)
Indian Ricegrass (Oryzopsis hymenoides)
Blue Grama (Bouteloua gracilis)
Hopi Blanket Flower (Gaillardia pinnatifolia)
Sunflower (Helianthus helioides)
Annual Buckwheat (Areionum divaricatum)
Globemallow (Sphaeralcea sp.)
Mormon Tea (Ephedra sp.)
Soapweed (Yucca sp.)

All other sites:

Indian Ricegrass (Oryzopsis hymenoides)
Broom Snakeweed (Gutierrezia sarothrae)

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV,
October 1993.

Rubber Rabbitbrush (Chrysothamnus nauseosus)
Shadscale (Atriplex confertifolia)
Soapweed (Yucca sp.)
Mormon Tea (Ephedra sp.)
Prickly Pear Cactus (Opuntia sp.)
Hopi Blanket Flower (Gaillardia pinnatifolia)
Foxtail Barley (Hordeum jubatum)
Salt Cedar (Tamarix chinensis)

Those animals identified as inhabiting the Cameron III and IV
project areas are listed in Table 4.

Table 4. Animal species found to occur, by sign or
observation, on or in the vicinity of the Cameron III and IV
reclamation area.

Mammals:

Coyote (Canis latrans)
Red Fox (Vulpes fulva)
Cottontail Rabbit (Sylvilagus sp.)
Black-tailed Jackrabbit (Lepus californicus)
Badger (Taxidea taxus)

Birds:

Common Raven (Corvus corax)
Say's Phoebe (Sayornis saya)
Mourning Dove (Zenaida macroura)
Horned Lark (Eremophila alpestris)

Reptiles:

Side-blotched Lizard (Uta stansburiana)

Cliffs of sufficient size to provide eagle nesting habitat
exists in the vicinity of the project areas. An archaeological
survey made notice of the fact that eagles were suspected to be
nesting in the vicinity (Hopi HPD, 1993). Eagles are suspected to
nest upon Black Point (Hopi HPD, 1993). Specific nesting locations
were not attained. Distances from projects site locations were
calculated for mitigative purposes (Table 5).

Table 5. Approximate distance from project sites to an area on Black Point which may provide suitable Golden eagle nesting habitat. Sites not listed are of sufficient distance from Black Point and construction of these sites would not pose a threat to eagles nesting on Black Point.

<u>Site Number</u>	<u>Miles</u>
NA-0179, 0180, 0186, 0187	2.0
NA-0155a,b	4.0
NA-0166	3.0
NA-0172a,b, 0173, 0174, 0175	3.0
NA-0179, 0180, 0194, 0195	2.0
NA-0197, 0198	2.0
NA-0196a, 0199x	3.25

CONCLUSIONS

No plants of concern were found in and or in the vicinity of the proposed Cameron III and IV reclamation sites at the time of this survey. No plant species of concern are expected to be negatively affected by the construction of these projects.

Eagles nest from the beginning of March through August (Ryan, NNHP Zoologist, 1993). Eagles most likely use the area in and around the project areas for foraging and use the volcanic and sandstone cliffs for nesting. Project sites NA-0179, 0180, 0166, 0172(a&b), 0173, 0174, 0175, 0179, 0180, 0194, 0195, 0197, 0198, 0196a, and 0199x are in relatively close proximity to the volcanic plug. Golden eagles are highly susceptible to disturbance during the breeding season. Cameron projects III and IV may effect eagles found in this area if blasting and other construction is done during the breeding season.

For mitigative purposes it is recommended that the suspected nesting area be visited in mid to late March 1994 to determine if there are eagles nesting on or in the vicinity of Black Point. If it is determined that eagles are nesting on Black Point then a 1.5 mile buffer should be established from the nest and no construction should take place within this buffer during the breeding season. If the nest is within line of sight of construction then it is recommended that a 2.5 mile buffer be established with no construction during the breeding season (Suter, 1981). If a survey is completed and it is determined that there are no eagles nesting

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV, October 1993.

there in 1994 then construction may commence with no negative effects expected upon the golden eagle.

Ferruginous hawks were not observed during the time this survey was conducted. Cliffs of sufficient size are located within the vicinity of the project areas. Badland topography which ferruginous hawks prefer for nesting is found in the Cameron area. Ferruginous hawks most likely use the area in and around the proposed project sites for nesting and the grassland to the south for foraging. Ferruginous hawk nesting season is from March through mid-July (Ryan, pers. comm., 1993).

A survey will be conducted for the nesting ferruginous hawk in the project vicinity as well as on Black Point. No negative impacts is expected upon the ferruginous hawk if no nests are found closer than 1 mile from the proposed construction sites (Suter, 1981).

No burrowing owls were found in the project sites or in the vicinity of these project sites. Burrowing owl inhabit prairie dog, badger, and kangaroo rat burrows and are closely associated with these species. Burrows found around these sites were not inhabited by burrowing owls nor were there any signs of their presence. No negative effects are expected with the construction of these projects upon the burrowing owl.

Black-footed ferrets are closely associated with prairie dog towns for prairie dogs are their primary food source. According to Navajo Fish & Wildlife guidelines (NFWD, 1985) a prairie dog town is to be investigated for black-footed ferret inhabitation if the prairie dog town exceeds 10 acres in size or if the cumulative occurrence of towns closely associated with one another encompasses more than 120 acres. Prairie dog towns found at the project sites were not in excess of 120 acres. Due to the lack of extensive prairie dog towns greater than 120 acres in size no negative effect upon the black-footed ferret is expected with the construction of the Cameron III and IV projects.

Leopard frogs have the potential to exist within the ponds found in some of the project sites. No leopard frogs were observed during this survey. These ponds were created as a result of the mining and are radioactively contaminated. There are health hazards associated with the presence of these ponds and the benefits gained with the reclamation of these ponds outweighs the benefits created by the ponds. The contaminated water sources will be replaced with other livestock watering ponds with presumably uncontaminated water. Direct impacts to the leopard frog are expected to be minimal from these projects.

T & E Species Evaluation, NFWF, NAML Cameron Project III & IV, October 1993.

The Little Colorado River flows through the Cameron III and IV project areas. The Little Colorado River is important habitat for the endangered Humpback Chub (*Gila cypha*). The Little Colorado River contains the largest known breeding population of humpback chub in the lower Colorado River Basin. This population is susceptible to contaminants from any drainage which feed the Little Colorado River. Potential bioaccumulation of radioactive elements and the corresponding negative physiological effects should be addressed (Wrenn, 1987, Poston, 1984). Potential uranium contamination from tailing piles of the Little Colorado River and the potential negative effects upon ichthyofauna, both during construction and post-construction, should be addressed.

SUMMARY/RECOMMENDATIONS

No plant species of concern were found in the projects sites or in the project site vicinity. No negative impacts upon these species is expected with the construction of these sites.

Eagles are suspected to nest on Black Point which is in the vicinity of the project sites. A 1.5 mile buffer should be established around the nest site if a nest site is found. No construction activities should be conducted within this buffer between the dates of March 1 through August 31. If construction outside of this 1.5 mile buffer is in direct line of site of the nest then a 2.5 mile buffer is recommended. The use of heavy equipment, drilling, and blasting should be avoided until after August 31 at sites which fall within the buffer zones.

A survey for golden eagles will be conducted in mid to late March 1994 to determine if Black Point is used for nesting by this species. If no nesting golden eagles are found then no negative impacts are expected upon this species with the reclamation of the project sites.

The vicinity around the project sites will be searched for nesting ferruginous hawks during the same time period. If an active nest is found establishment of a one mile buffer is recommended for nesting ferruginous hawks with no construction within this buffer during respective breeding season. If no nesting ferruginous hawks are found then no negative impacts would be expected upon this species with the reclamation of these project sites.

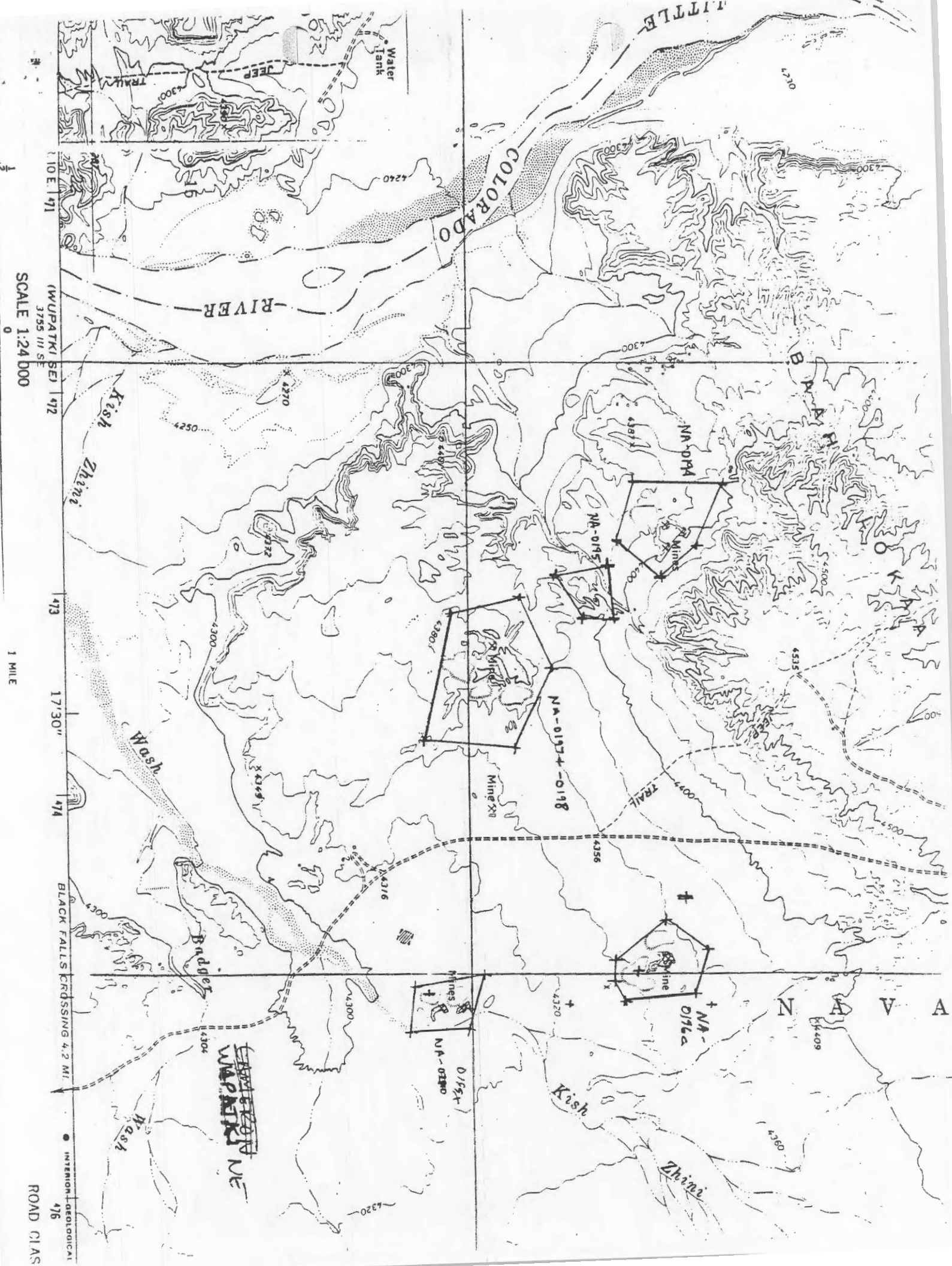
The Little Colorado River is important habitat for the endangered humpback chub. The potential for uranium contamination of the humpback chub within the Little Colorado River during and as a result of reclamation should be addressed.

T & E Species Evaluation, NFWD, NAML Cameron Project III & IV, October 1993.

NOTE: Raptor nest locations are given for management purposes only.

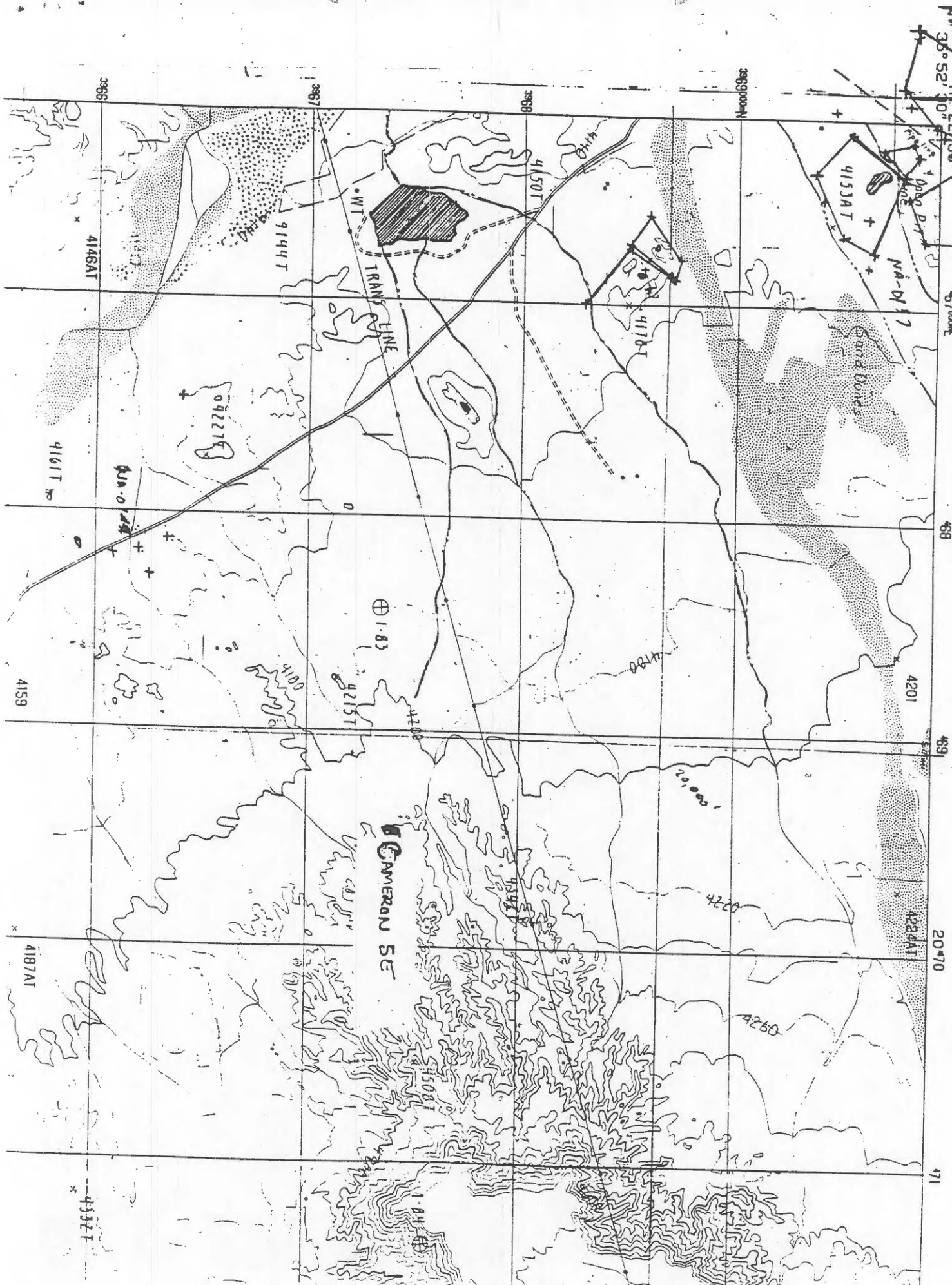
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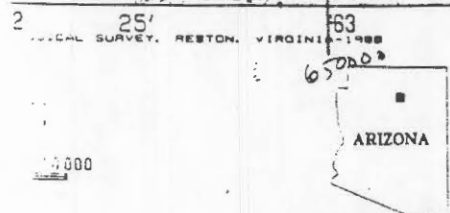
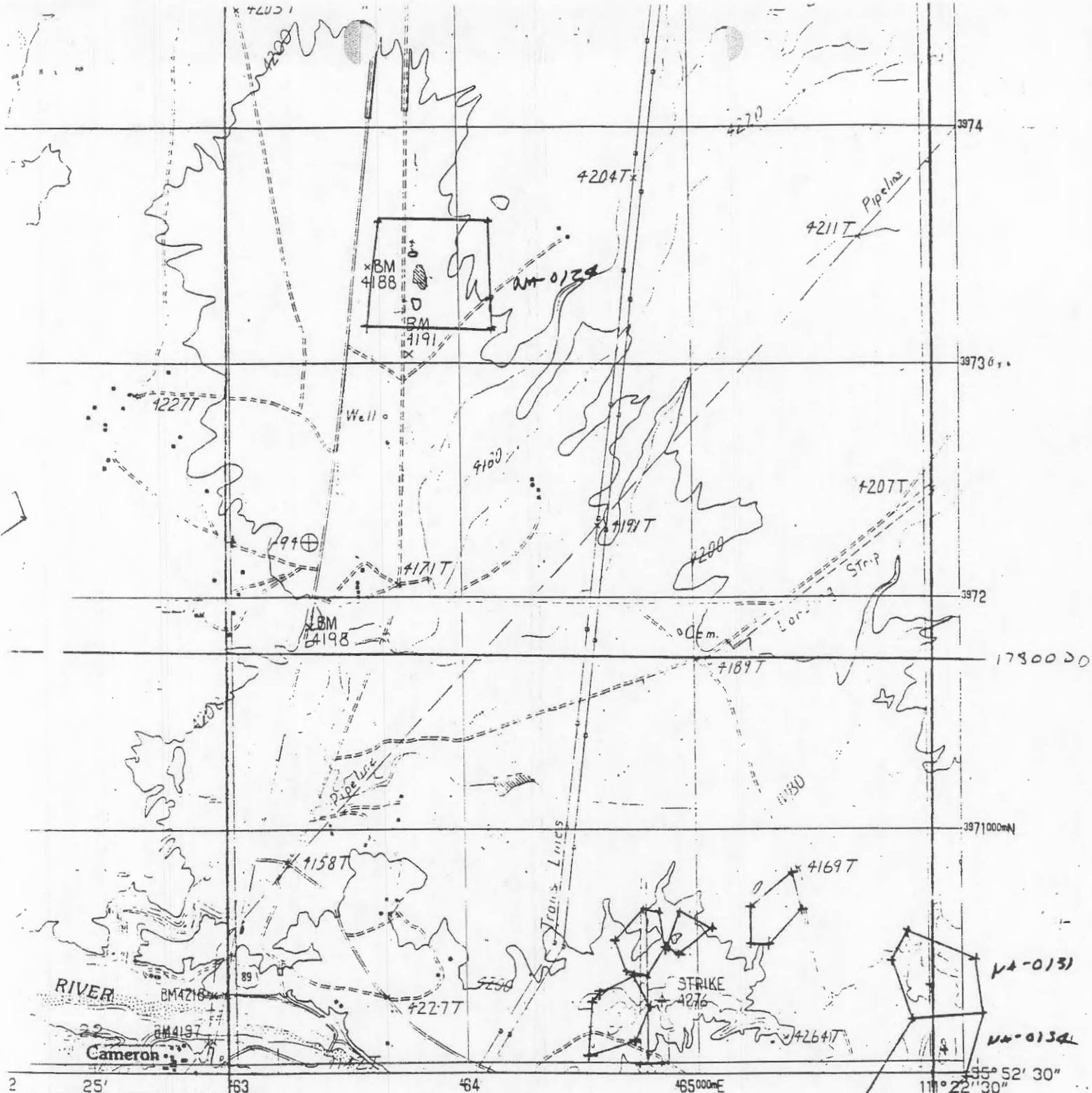
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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No. 11822/3d
35° 52' 30" N
118° 22' 30" W
467000E





QUADRANGLE LOCATION

1	2	3	1 Blue Spring SE
			2 Shadow Mountain Well
			3 Moenave SE
4		5	4 Coconino Point
			5 Cameron NE
			6 Coconino Point SE
			7 Cameron South
6	7	8	8 Cameron SE

ADJOINING 7.5' QUADRANGLE NAMES

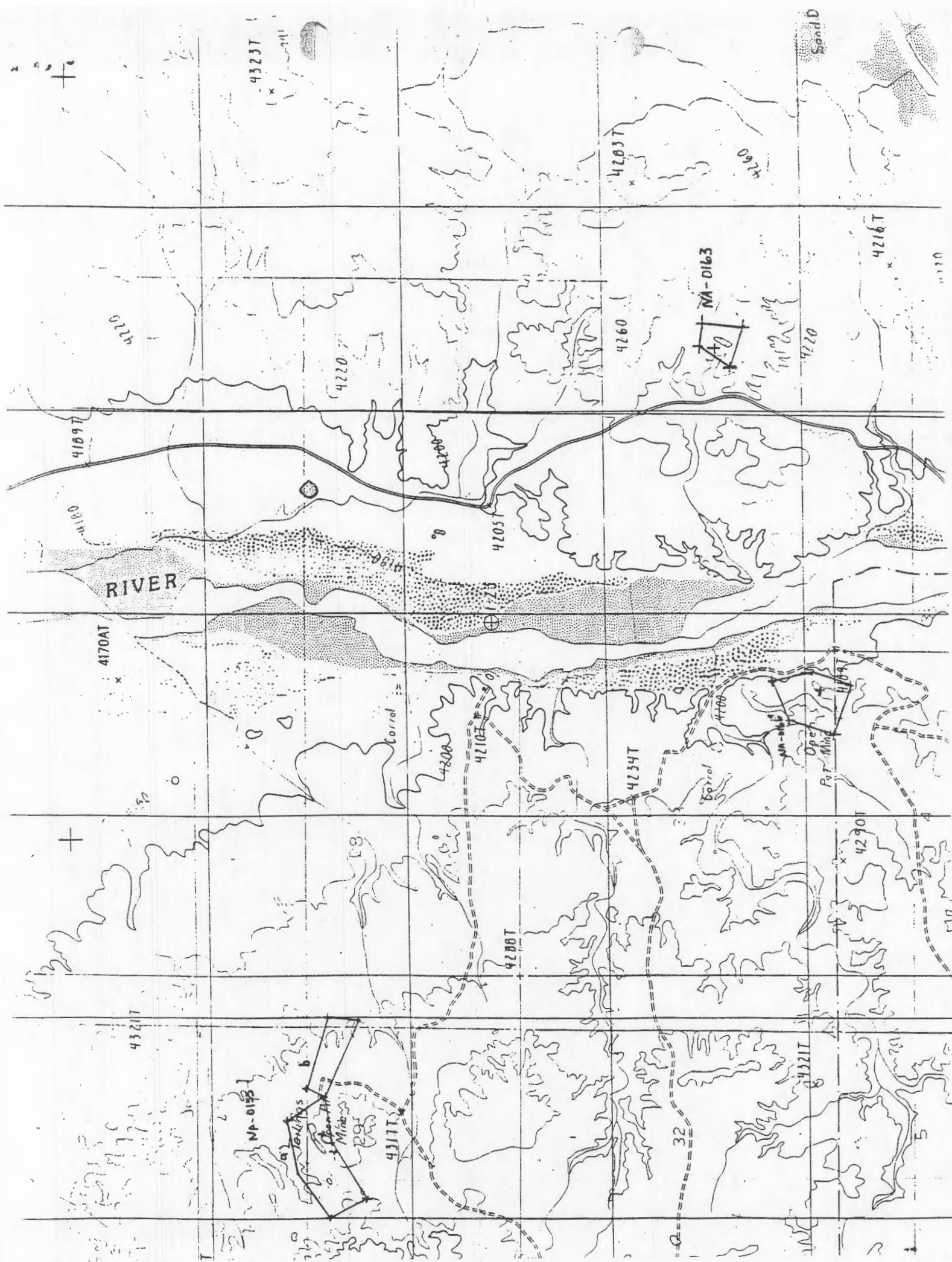
ROAD LEGEND

Improved Road
 Unimproved Road
 Trail

○ Interstate Route ○ U.S. Route ○ State Route

CAMERON NORTH, ARIZONA
 PROVISIONAL EDITION 1988

35111-H4-TF-024





THE NAVAJO NATION

P.O. BOX 308 • WINDOW ROCK, ARIZONA 86515 • (602) 871-4941

PETERSON ZAH
PRESIDENT

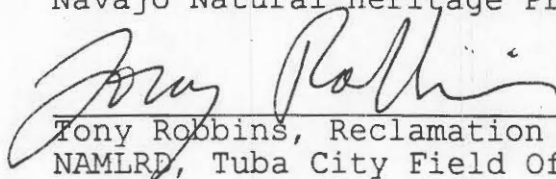
MARSHALL PLUMMER
VICE PRESIDENT

January 03, 1994

M E M O R A N D U M:

TO: Steven Chischilly, Biologist
Biological Survey Services
Navajo Natural Heritage Program

FROM:



Tony Robbins, Reclamation Specialist II
NAMLRD, Tuba City Field Office

SUBJECT: REQUEST FOR SERVICES: SURVEY TO DETERMINE GOLDEN EAGLE
INHABITATION ON AND IN THE VICINITY OF BLACK POINT

Per your November 9, 1993 "Threatened and Endangered Species Survey and Biological Evaluation" for Navajo Abandoned Mine Land Reclamation Department's Tuba City Field Office's (NAMLRD-TCFO) Cameron Projects 3 and 4 (CP3 and CP4) SUMMARY/RECOMMENDATIONS, NAMLRD-TCFO requests of the Navajo Fish and Wildlife, Biological Survey Section to submit a cost estimate for a biological survey to determine golden eagle nesting and occupancy in the Black Point area.

Your evaluation states in the SUMMARY/RECOMMENDATIONS (Page 11) states the following:

Eagles are suspected to nest on Black Point which is in the vicinity of the project sites. A 1.5 mile buffer should be established around the nest site if a nest is found. No construction activities should be conducted within this buffer between the dates of March 1 through August 31. If construction outside of this 1.5 mile buffer is in direct line of sight of the nest then a 2.5 mile buffer is recommended. The use of heavy equipment, drilling, and blasting should be avoided until after August 31 at sites which fall within the buffer zones

A survey for golden eagles will be conducted in mid to late March 1994 to determine if Black Point is used for nesting by this species. If no nesting golden eagles are found then no negative impacts are expected upon this species with the reclamation of the project sites.

The vicinity around the project sites will be searched for

nesting ferruginous hawks during the same period. If an active nest is found establishment of a one mile buffer is recommended for nesting ferruginous hawks with no construction within this buffer during respective breeding season. If no nesting ferruginous hawks

are found then no negative impacts would be expected upon this species with the reclamation of these project sites.

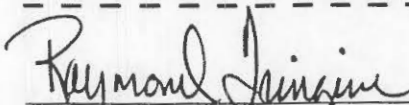
The above information serving as a basis, I drew a buffer of 1.5 miles from the foot of Black Point, see attached map for location of buffer zone and the AML sites, and there seems to be no sites with in the buffer zone. Likewise, in order to establish the direct line of sight and the 2.5 mile buffer zone from the nest site, NAMLRD-TCFO needs to know where this nest site is located in order to plan effectively around the above recommendations. In addition, NAMLRD-TCFO needs to know if there are actually any ferruginous hawks nesting in the vicinity of the CP3 and CP4 sites.

In order for NAMLRD-TCFO to abide by the mitigation measures recommended and to plan around the above recommendations, NAMLRD-TCFO will require that the Biological Survey Services Program conduct a biological survey to determine golden eagle nesting and occupancy, in the Black Point area. The subject request for services should include all applicable costs, including hazard pay (may not be applicable since Black Point is not in the boundaries of any abandoned uranium mine site), vehicle expenses, personnel involved in preliminary research, report writing, field survey, etc, and operating expenses.

This estimate should be submitted as soon as possible to NAMLRD-TCFO. The payment for the above services will charged to two separate accounts. Half of the cost will be charged to FY 94 Administration account and the other half will be charged to the CP4 project account; hence, a request for payment and payment for half of the services will have to be made before the end of the current fiscal year, i.e. before the end of March 1994.

Please call me at (602) 283-4845 or 283-4847 if there are any questions regarding this request.

C O N C U R R E N C E :



Raymond Tsingine, Reclamation Specialist III
NAMLRD, Tuba City Field Office

xc: Central Files
CP3/MEM; CP4/MEM
~~Sam F. Spiller~~ USFWS
ASMR, ALB



THE NAVAJO NATION

P.O. BOX 308

• WINDOW ROCK, ARIZONA 86515

• (602) 871-4941

PETERSON ZAH
PRESIDENT

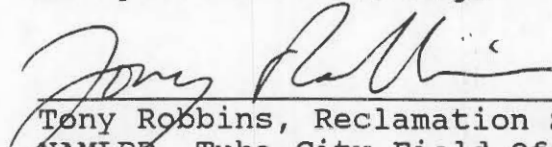
MARSHALL PLUMMER
VICE PRESIDENT

January 04, 1994

M E M O R A N D U M:

TO: Steven Chischilly, Biologist
Biological Survey Services
Navajo Natural Heritage Program

FROM:

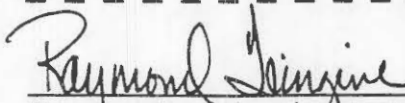

Tony Robbins, Reclamation Specialist II
NAMLRD, Tuba City Field Office

SUBJECT: NOTICE TO PROCEED - THREATENED AND ENDANGERED SPECIES
SURVEY: GOLDEN EAGLE AND FERRUGINOUS HAWK

Per your January 4, 1994 memorandum and price quote for biological survey services, NAMLRD, Tuba City Field Office accepts the quote and hereby issues this Notice to Proceed with respect to the dates for starting the survey as outlined in your memorandum and "Charges for Services."

Please call me at (602) 283-4845 or 283-4847 if there are any questions regarding this memorandum and prior to the initiation of the field work.

C O N C U R R E N C E:


Raymond Tsingine, Reclamation Specialist III
NAMLRD, Tuba City Field Office

xc: Central Files
CP3/MEM; CP4/MEM
Sam F. Spiller, USFWS
OSMRG, ALBQ.



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PETERSON ZAH
PRESIDENT

MARSHALL PLUMMER
VICE PRESIDENT

January 04, 1993

Sam F. Spiller, Field Supervisor
Ecological Services, U.S.F.W.S.
U.S. Department of Interior
3616 W. Thomas, Suite 6
Phoenix, AZ 85019

Dear Mr. Spiller:

The Navajo Abandoned Mine Land Reclamation Department (NAMLRD) has applied for and received a construction grant from the Office of Surface Mining, Reclamation and Enforcement to reclaim eleven (11) abandoned mine land (AML) sites and is applying for a construction grant to reclaim thirteen (13) AML sites in Coconino County, Arizona.

In the process to comply with the National Environmental Policy Act (NEPA), NAMLRD had the Navajo Nation Fish and Wildlife Department's Biological Survey Section do a "Threatened and Endangered Species Survey and Biological Evaluation" for both aforementioned projects and they have determined that an additional survey will be required to determine impacts of these projects on possible golden eagle and ferruginous hawk nesting in the Black Point area. A copy of the "T & E Survey and Biological Evaluation," and copies of correspondences between NAMLRD and Navajo Fish and Wildlife are attached for your agency's information and awareness of NAMLRD's actions to comply with NEPA.

Please call myself or Tony Robbins at (602) 283-4845 or 4847 if you have questions concerning our projects and/or the attached documents.

Sincerely,

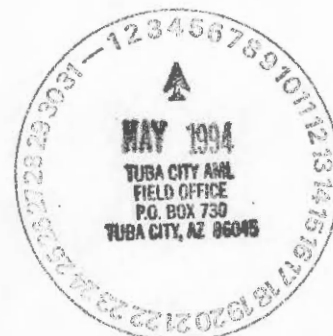
Raymond Tsingine, Reclamation Specialist III
Tuba City Field Office
Navajo AML Reclamation Department

cc: OSMRE, Albuquerque Field Office
CAM/LTR
Central Files



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DRAFT



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PETERSON ZAH
PRESIDENT

MARSHALL PLUMMER
VICE PRESIDENT

MEMORANDUM:

TO: Tony Robbins, Reclamation Specialist II
Navajo Abandoned Mine Reclamation Department
Tuba City Field Office

FROM: Steven Chischilly, Biologist
Navajo Fish & Wildlife Department
Navajo Natural Heritage Program

SUBJECT: NAMLRD CAMERON III & IV GOLDEN EAGLE AND FERRUGINOUS
HAWK SURVEY

DATE: MAY 4, 1994

Attached is the golden eagle and ferruginous hawk survey report for the Navajo Abandoned Mine Lands Reclamation Department (Tuba City Field Office) Cameron projects III and IV. These mines are abandoned uranium mines.

This survey was recommended in the initial report submitted November 9, 1993 for the initial field survey was conducted at a time when these species would be hard to find.

No golden eagle or ferruginous hawk nests were found during the survey of the project vicinity. No significant negative impact is expected upon these species with the construction of these projects.

An invoice will be sent to your office for the biological survey service. If you have any questions concerning the biological field survey or the report you may contact me at (602) 871-7070.

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EA File

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of pages 5

To Tony Robbins	From Steven Chischilly
Co. Navajo AML	Co. NNHP
Dept. Tuba City Field	Phone # 602-871-7070
Fax # (602) 283-5765	Fax # 602-871-6177

DRAFT

T&E Species Evaluation, NFWD, NAML Cameron Project III & IV, May 1994.

THREATENED AND ENDANGERED SPECIES SURVEY AND
BIOLOGICAL EVALUATION: GOLDEN EAGLE AND FERRUGINOUS
HAWK

for:

NAVAJO ABANDONED MINE LAND RECLAMATION
DEPARTMENT-TUBA CITY FIELD OFFICE

project:

CAMERON III AND IV:
ABANDONED URANIUM MINES

submitted by:

NAVAJO FISH & WILDLIFE DEPARTMENT
BIOLOGICAL SURVEY SERVICES
P.O. BOX 1480
WINDOW ROCK, ARIZONA 86515

MAY 5, 1994

Report prepared by:

Steven Chischilly, Biologist
Biological Survey Services
Navajo Fish & Wildlife Department

C O N C U R R E N C E:

Larry Benallie, Sr., Director
Navajo Fish & Wildlife Department

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DRAFT

T&E Species Evaluation, NFWD, NAML Cameron Project III & IV, May 1994.

INTRODUCTION

A golden eagle (Aquila chrysaetos) and ferruginous hawk (Buteo regalis) survey was conducted for the Navajo Abandoned Mine Lands Reclamation Department-Tuba City Field Office (NAMLRD-TCFO) Cameron Projects III & IV abandoned uranium mine sites and vicinity on April 19, 20, and 21, 1994 by Steven Chischilly, Biologist, with the Biological Survey Services Program (BSSP) of Window Rock, Arizona. These surveys were conducted to investigate the inhabitation or occurrence of the golden eagle and the ferruginous hawk within or adjacent to the proposed project sites. Of main concern was Black Point which is a lava flow mesa which provides potential nesting habitat for the golden eagle and the sandstone pinnacles which exist near the Little Colorado River (refer to attached map). These sandstone pinnacles provide potential nesting habitat for the ferruginous hawk.

The area surveyed for the occurrence or nesting of these species is located on the Wapatki, NE 7.5" USGS quadrangle (refer to attached map).

METHODS

Steven Chischilly met with Tony Robbins, Reclamation Specialist II, and Raymond Tsinigine, Reclamation Specialist III, on April 20, 1994 at the Tuba City field offices. This meeting was held to acquaint Chischilly with the best access route to Black Point. It was decided that the most suitable access route to the survey area would be via the Spider Web Ranch which is located east of state highway 89. The turn off to the ranch is located approximately 5 miles south of Gray Mountain trading post on highway 89.

The volcanic flow mesa known as Black Point was surveyed via a hiking survey and with a spotting scope and binoculars. Jackrabbit wash was hiked as well as the mesas east of this wash. The basalt cliffs and the surrounding volcanic bench which are found on Black Point was hiked and scanned. The entire cliff ledge was hiked and scanned for the presence of nests.

The sandstone pinnacles were also searched via binoculars and spotting scope for the presence of nesting ferruginous hawks. Most of these sandstone pinnacles are located near the Little Colorado River.

RESULTS

The vegetation type characteristic of the Cameron III and IV problem areas as described by Brown (1982) is Great Basin Desertscrub of the shadscale series. The problem areas are located

DRAFT

T&E Species Evaluation, NFWD, NAML Cameron Project III & IV, May 1994.

in the Painted Desert of the Navajo Nation. This desert is a cold temperate desert.

Plants and animals were identified either on sight, tracks, call or by scat (Table 1). Plants not identifiable in the field were collected for later identification in the laboratory.

Table 1. Plants and animals found in the vicinity of Black Point and the Little Colorado River.

Plants:

Shadscale (Atriplex confertifolia)
 Broom Snakeweed (Gutierrezia sarothrae)
 Camelthorn (Alhagi camelorum)
 Indian Ricegrass (Oryzopsis hymenoides)
 Blue Grama (Boutaloua gracilis)
 Hopi Blanket Flower (Gaillardia pinntifolia)
 Sunflower (Helianthus heliardus)
 Annual Buckwheat (Areigonom divaricatum)
 Globemallow (Sphaeralcea sp.)
 Mormon Tea (Ephedra sp.)
 Soapweed (Yucca sp.)
 Rubber Rabbitbrush (Chrysothamnus nauseosus)
 Prickly Pear Cactus (Opuntia sp.)
 Foxtail Barley (Hordeum jubatum)
 Salt Cedar (Tamarix chinensis)
 Dune Broom (Parryella sp.)

Animals:

Raven (Corvus corax)
 Red-tailed Hawk (Buteo jamaicensis)
 Sharp Shinned Hawk (Accipiter striatus)
 Common Collared Lizard (Crotaphytus collaris)
 Loggerhead Shrike (Lanius ludovicianus)
 Bendire's Thrasher (Toxostoma bendirei)
 Black-throated Sparrow (Amphispiza bilineata)
 Canyon Wren (Catherpes mexicanus)
 Merlin (Falco columbarius)
 Pronghorn (Antilocapra americana)
 Mourning Dove (Zenaida macroura)
 Horned Lark (Eremophila alpestris)

No ferruginous hawks or golden eagles were observed during the survey for these species at the Cameron III and IV problem areas.

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T&E Species Evaluation, NFWD, NAML Cameron Project III & IV, May 1994.

CONCLUSIONS

No ferruginous hawks or golden eagle nests were found during this survey nor were any ferruginous hawks or golden eagles seen. No significant negative impact is expected upon the golden eagle and the ferruginous hawk with the construction of the NAMLRD Cameron III and IV project sites.

REFERENCES

Brown, David E. 1982. Desert Plants: Biotic Communities of the American